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Report No. 1

INTEGRATION OF INFORMATION FOR HOSPITAL RATE SETTING

VOLUME 11: INFORMATION AVAILABLE FOR HOSPITAL
RATE REVIEW IN ARIZONA

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INTEGRATION OF INFORMATION FOR HOSPITAL RATE SETTING

VOLUME 11: INFORMATION AVAILABLE FOR HOSPITAL RATE
REVIEW IN ARIZONA

by

Diane Rowland

This report was prepared under a contract between the Social Security Administration, HEW and the Harvard University Center for Community Health and Medical Care. The views and opinions expressed in the report are the contractor's and no endorsement by the Social Security Administration or HEW is intended or should be inferred. The project officer for this contract was William L. Damrosch, a staff member within the Division of Health Insurance Statistics, Office of Research and Statistics.

Under the HEW reorganization announced March 8, 1977 the Division of Health Insurance Studies has been transferred to the Health Care Financing Administration.

Contract Number 600-75-0142

PREFACE

This is one of a series of working papers in a project whose task is to explore the types of information required to permit equitable hospital rate setting, and the obstacles to its access, integration and use.

As part of the effort to identify the general scope of information required to establish hospital rates, analysis was made of the information presently employed in five different states: Arizona, Maryland, Massachusetts, New York, and Washington. This report on Arizona, like those on the other states, was based on an examination of the various reporting forms employed and other background materials, together with interviews with officials in the agency responsible for administering the rate review program.

The report attempts to cover the relation of the information collected to the program's particular objectives and rate review process, and types of data available, and the history of how the reporting system was developed. The characteristics of the reporting system are described and illustrated in charts or exhibits. Problems of validating, managing and using the information are discussed. Finally, an appraisal of the strengths and limitations of the information system is made according to criteria developed as part of this project and presented in the proceedings of its 1975 Conference on Uniform Reporting for Hospital Rate Reviews.

Katharine G. Bauer

June, 1976

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I. BACKGROUND

Since 1972, all non-federal hospitals, nursing homes, personal care homes, and other health care institutions in Arizona* have been required to submit their planned rate schedule changes to both the state and a designated local planning agency for review and comment. Health facility compliance with the findings of the review agencies is voluntary. Thus, the Arizona program can be characterized as rate review with mandatory participation, but voluntary compliance. Public disclosure of rate schedule changes and review agency deliberations and findings is the primary incentive for health facilities to contain their rising costs.

During the rate review process, the annualized gross patient review (GPR) under the existing rate schedule and the proposed rate schedule is compared and the percent increase in GPR is calculated. The reviewers then establish a recommended maximum increase and request the applicant to adjust its rate schedule to keep the projected increase in GPR to that level. The reviewers make recommendations as to rate schedules and operational improvements on both a departmental and total hospital basis, but lack authority to enforce compliance.

During 1975, the Bureau of Health Economics of the Arizona Department of Health Services (DHS), the state agency responsible for rate review, analyzed 80 applications for proposed rate increases from hospitals, nursing and personal care institutions. In that period, total hospital rate increases were limited to 9.0% and nursing home rate increases to 3.8%**. No hospitals and only two nursing homes raised their rates contrary to the joint recommendations of DHS and the local planning councils. Six hospitals and six nursing homes voluntarily reduced their planned increases based on review recommendations, representing annualized savings in GPR of \$2,555,000 and \$208,000, respectively.¹

* There are 70 non-federal hospitals (10,009 licensed beds), 65 nursing homes (4,769 licensed beds) and 18 personal care homes (1163 licensed beds) in Arizona.

** Total increase in annualized GPR for all institutions in state.

Program Objectives

By 1971, the spiraling cost of health care and its impact on doing business in Arizona had become a major concern of the Arizona citizens and business community. When Phoenix's 695-bed Good Samaritan Hospital announced a rate increase, Arizona's largest employer, the Motorola Company, decided to use its corporate resources to publically oppose it. A heated confrontation took place between the hospital personnel and the company with the hospital taking the position that the hospital's rates were an internal matter and should not be the subject of public debate. In the end, however, the hospital agreed not to implement the rate increase and to accept the assistance of voluntary resources provided by the Motorola Company to determine ways of achieving cost containment in the hospital's operation.

In response to this confrontation and media and public pressure over rising health care costs, on May 21, 1971, the Arizona legislature enacted House Bill 15. Effective January 1, 1972, Article 3 of this law gave the Arizona Commissioner of Health responsibility for:²

- certificate of need and permit authorization for health care expansion projects
- licensure of health care institutions
- inspection and auditing of health care facilities
- development of uniform accounting systems
- rate review in cooperation with local planning agencies

Although, as will later be discussed, the administrative structure of Arizona State government has been reorganized several times since 1971 and responsibility for rate review has been shifted in the process, the objectives and functions outlined above have remained intact through the reorganizations.

The primary objective of the rate review program was to be public disclosure of health care institution rates and charges, and state and local review of the appropriateness of proposed changes in those rates. Legislation has not yet sought to expand the rate review function to a rate-setting or

other type of regulatory process. The objective in Arizona is to make the health care institutions accountable to the public by requiring them to justify their need for rate or charge increases in a public forum and to use public disclosure as a force to moderate price increases. It is hoped that the state and local review and findings will serve as an educational process for the health care institutions by strengthening internal management and helping management to better understand the institution's financial operation through careful internal analysis of the need for rate increases, as well as by providing management with the assessment and suggestions of the outside reviewers. Moreover, it was hoped that the processes of preparing the submission and of the rate review would themselves serve as a deterrent to frequent or unnecessary rate changes. The institution's motivation to comply with reviewers' recommendations was expected to come from its desire to protect its community image. Also, providers know that if the voluntary program fails to work, a mandatory regulatory program would probably be enacted. Another incentive is maintenance of relations with review agencies which do have regulatory authority in other areas, for example, certificate of need.

Under the provisions of House Bill 15, each existing institution is required to file a copy of its rate and charge schedule with the Commissioner of Health, who is authorized to review the schedules and make the findings public. The law requires that:

Such findings shall include information on how the rates and charges relate to the operating costs and financial conditions, occupancy rates, and services provided by the institution and to rates and charges for the same or similar items or services in other institutions. (Section 36-450.01)

In addition to the initial review in 1972, the law requires that any increase in a rate or charge is not to be instituted by a health care institution until:

the increase or change has been filed with the Commissioner and reviewed in the same manner as the schedule set forth in Section 36-450.01. (Section 36-450.03)

The statute also requires the institution to file its proposed rate changes with the local planning agency. The local agency must hold a public hearing within 15 days and file a report of its findings with the Commissioner within 30 days. The Commissioner has the option of adopting the local agency's findings or conducting a separate review, but in any case, he must make public his actions on the findings of the local planning agency within 60 days.

In 1973, House Bill 2008 was enacted changing the administrative structure of the rate review program, but retaining the same functions and emphasis. The Commissioner of Health's rate review responsibilities were reassigned to the Arizona Health Planning Authority, the statewide planning agency. It was felt that this transfer would bring more community input into the review process as well as incorporate rate review as a basic ingredient of health planning. The Authority was required to fulfill all of the responsibilities of the Commissioner outlined above in addition to publishing at least annually an in-depth comparative study of the rates and charges of all institutions. House Bill 2008 also required the Authority to prescribe uniform accounting and reporting practices for each type of health care institution. The time frame for a public hearing by the local planning agency on proposed rate increases was expanded from 15 days to 30 days and a requirement that the institution be given 10 days written notice of the hearing was added.

In 1973, House Bill 2004, which became effective January 1, 1974, dissolved the Arizona Health Planning Authority and created the Arizona Department of Health Services (DHS). The Division of Planning and Resources in the newly formed DHS was given responsibility for rate review, certificate of need, standards for uniform accounting, and a wide range of other health-related activities. Within the Division of Planning and Resources, responsibility for rate review and development of uniform accounting and reporting were assigned to the Bureau of Health Economics. Charts 1 and 2 depict the new organizational structure.

CHART 1: Arizona Department of Health Services

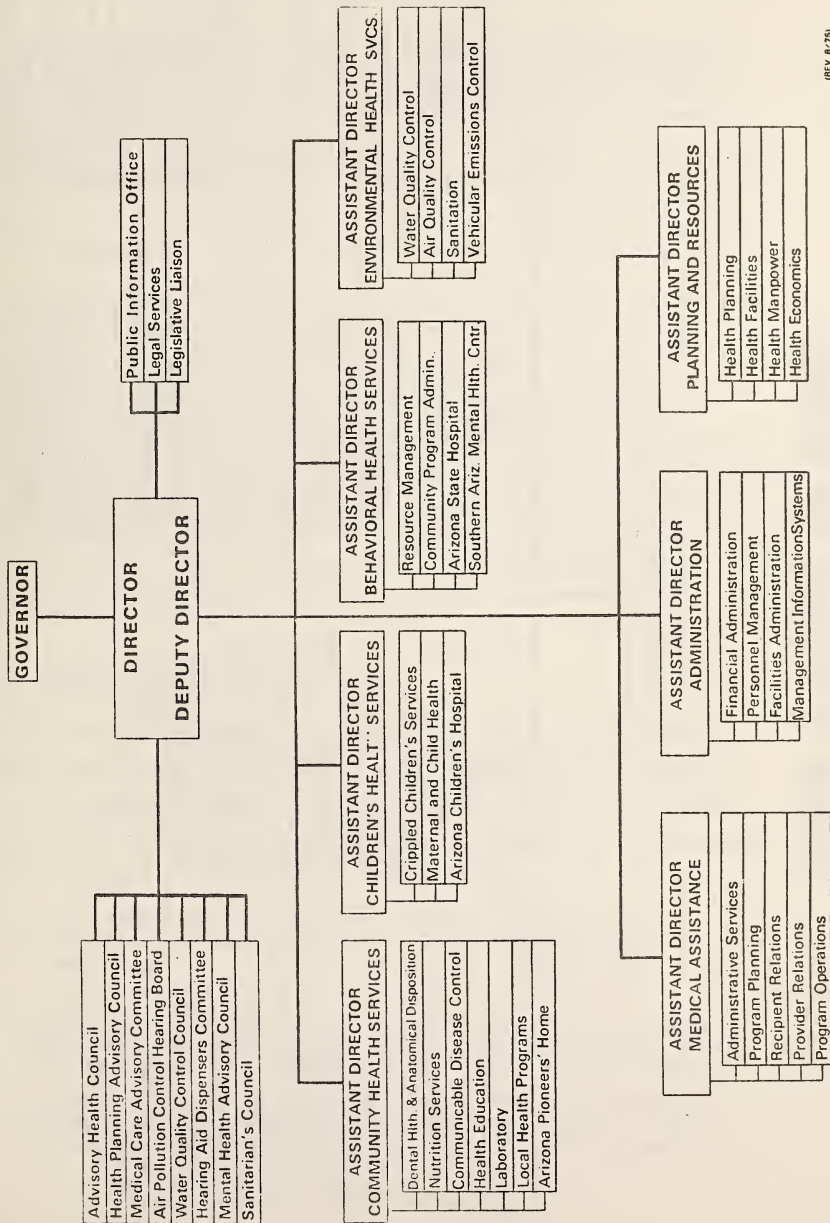
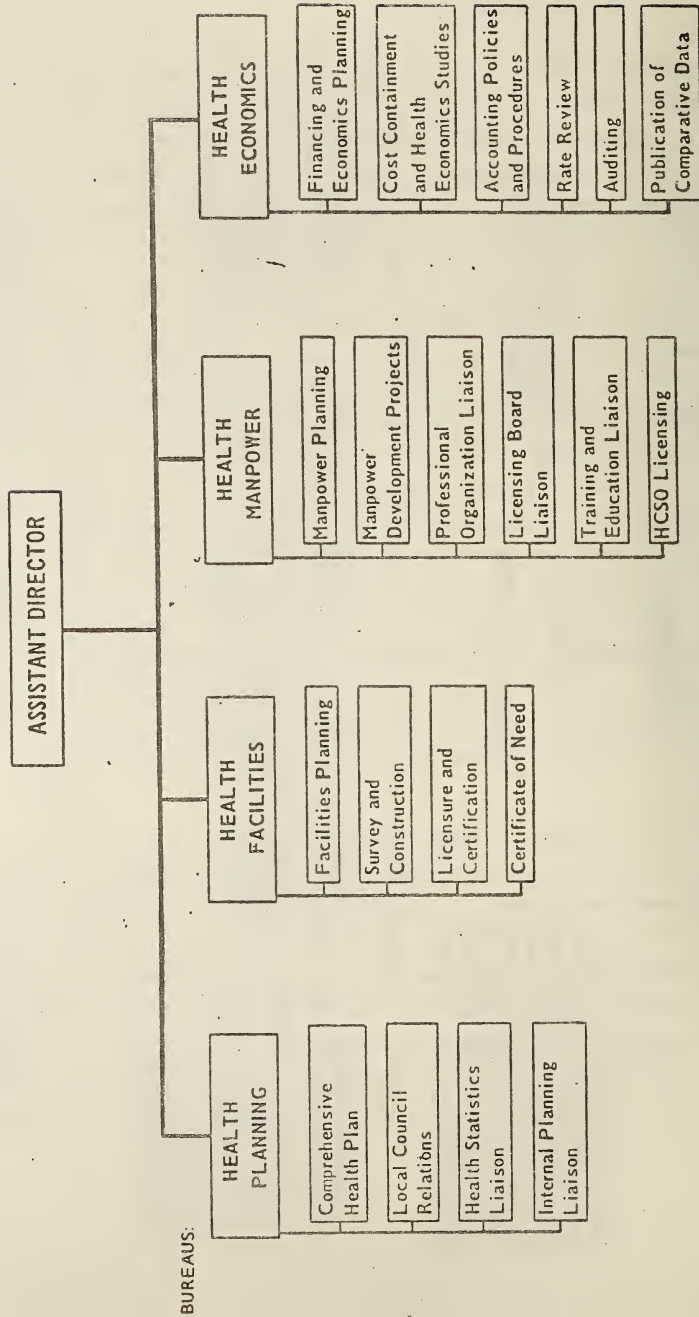


CHART 2: DIVISION OF PLANNING AND RESOURCES



The Bureau of Health Economics is funded by state appropriation at a current annual level of \$136,000 to cover personnel, employee benefits, purchase of professional services, travel, and other operating expenses. Staff of the Bureau in January 1976 consisted of a manager, two accountants, and one secretary supported by state monies, and a health economist and statistical clerk funded by Federal 314A CHP (Comprehensive Health Planning) and CETA (Comprehensive Employment Training Act) monies, respectively.

At the local agency level, rate review responsibility was assigned to the respective Health Planning Council, the 314-B agency. However, of the 14 counties in the state, only Maricopa and Pima counties were funded for rate review staff work, with staffs of two and one accountants, respectively. Staff support for the other councils is furnished primarily by the state staff. The rate review committees of the various local planning councils reflect a wide range of interests in the communities served, including professions such as industry management, bankers, CPAs, lawyers, teachers, physicians, small businessmen, health care providers, and third-party health care payors.

Statutory Authority to Collect Data

The DHS has broad statutory authority to set standards for health care institution accounting and reporting under Sections 36-125.03 and 36-426 of the Arizona Revised Statutes. Section 36-125.03 on uniformity of accounting, form and content, public disclosure, financial audit, and classification of health care institutions states in part:

- A. The Department shall prescribe uniform accounting practices and systems of accounts for each class or subclass of health care institutions established pursuant to this section...
- B. The Department shall prescribe and furnish forms of financial statements, schedules and reports to be submitted by health care institutions to the Department and the authorized local agency.
- C. The Department may require any health care institution to submit to the Department an annual financial report. Those institutions classified as hospitals, pursuant to this section,

shall be required to file with the Department an annual financial report certified to by an independent certified public accountant performed in accordance with generally accepted auditing standards.

D. The director may, when he deems it necessary, make an examination of such institutions' records and accounts. The costs incurred in connection with such examination shall be borne by the Department.

E. For purposes of this section, and in order to make meaningful comparisons as required by Section 36-436, the Department shall by regulation classify and subclassify health care institutions according to character, size, range of services provided, special services offered, duration of care and standards of patient care. Such classification or subclassification shall be consistent with licensing classifications established by the Department of Health Services.

The requirements for submittal of operating and financial statements are specified in Section 36-426:

Every health care institution licensed under this chapter shall submit to the director not later than one hundred and twenty days following completion of the calendar or fiscal year such operating statements and reports for the preceding calendar or fiscal year in such forms and containing such details as the director shall reasonably prescribe pursuant to Section 36-125.03.

Regulations promulgated under Arizona Revised Statutes, No. 36-125.03 and No. 36-426 require that for each fiscal year beginning on or after July 1, 1976, all hospitals utilize the accounting system and reporting requirements described in the Hospital Accounting and Reporting Manual published by the Department of Health Services. The new regulations require each hospital to submit operating statements and reports in the form and content prescribed in Section J, "Reporting Requirements" of the Manual not later than 120 days following the completion of each fiscal year which begins on or after July 1, 1976.

The Manual reporting requirements will replace regulation R9-11-113 which at the date of this writing in May 1976 requires hospitals to:

...submit to the Director not later than one hundred and twenty days following the institution's fiscal year the following statements and reports for the reporting year:

1. Income statement.
2. A balance sheet.
3. A statement of changes in financial position.
4. A cost finding statement indicating direct and indirect costs for each revenue center or department for institutions with more than one such department, provided that this information is readily available and its collection will not require an expenditure that would not have been incurred for other purposes.
5. The following applicable financial and statistical operating reports for each month not previously submitted:
 - a. For hospitals, a completed "Hospital Financial and Statistical Operating Report," DHS Form 201.

The rules and regulations promulgated to implement the rate review program (R9-11-114) require that no increase shall be made by any health care institution in any rate or charge unless the proposed increase has been filed with the Department of Health Services and the authorized local agency as provided in ARS No. 36-436.02 and 36-436.03. The regulation requires the institution to submit:

1. The applicable financial and statistical operating reports, DHS Form 201 or DHS Form 202, or comparable format subject to approval by the Director, for each of the months since the last annual submission.
2. The following applicable financial report:
 - a. Financial report for review of proposed rate increases--hospitals, DHS Form 301.
 - b. Financial report for review of proposed rate increases--nursing care institutions, DHS Form 302.

R9-11-114

When the new uniform reporting system becomes implemented, regulations replacing DHS 201 with the reports prescribed in Section J of the Manual will be promulgated.

II. TYPES OF DATA AVAILABLE

In the future, the basic elements of Arizona's information system for hospitals will be derived from two sets of documents: the Financial Report for Review of Proposed Rate Increases for Hospitals (DHS Form 301) and the reporting forms set forth in the Arizona Department of Health Services Hospital Accounting and Reporting Manual. DHS Form 301 is the basic information set for review of a proposed rate increase and must be submitted to DHS and the local planning agency each time the hospital seeks to increase its rates. (It is not submitted for those years in which the hospital does not alter its rate schedule.) An institution may supplement Form 301 with additional information as deemed necessary to justify its proposed increase.

The annual reporting forms must be completed and submitted along with a certified annual financial report to the DHS within 120 days after the close of the hospital's annual accounting period. Exhibits A and B depict the contents of each of these reports.

As has been noted, for fiscal years beginning before July 1, 1976 the Hospital Accounting and Reporting Manual was not implemented and the reporting requirements of Arizona Regulation R9-11-113 specified the format of the hospital's annual report. Since the reports submitted under R9-11-113 are being phased out, only the new uniform reporting package will be described here.

Financial Data

Both the annual reporting forms and DHS Form 301 require the hospitals to furnish data on cost, revenue, and volumes of service. The annual reporting forms request this data only for the completed accounting year, but DHS Form 301 asks for the prior year, base year, and projected year.

EXHIBIT A: FINANCIAL REPORT FOR REVIEW OF PROPOSED RATE INCREASES - HOSPITALS
(DHS Form 301)

	<u>Schedule No.</u>	<u>Page No.</u>
A. SUMMARY		
General Information		2
Statement of Need for Increased Rates		3
Financial and Statistical Summary		
Financial Summary	A-1	4
Statistical Data	A-2	5
Statistical Data	A-3	6
Statement of Changes in Financial Position	A-4	7
B. BALANCE SHEET INFORMATION		
Balance Sheet - Assets	B-1	8
Balance Sheet - Liabilities and Stockholders'		
Equity or Fund Balance	B-2	9
Balance Sheet - Restricted Fund	B-3	10
Statement of Changes in Stockholders'		
Equity or Fund Balance	B-4	11
Statement of Changes in Restricted Fund Balance	B-5	12
Additions to Property, Plant and Equipment	B-6	13
Notes to Financial Statements	B-7	14
C. REVENUES AND EXPENSES		
Statement of Revenues and Expenses	C-1	16
Revenue Detail - Patient	C-2	17
Deductions from Revenue, Other		
Revenue	C-3	18
Expense Detail - Nursing Services	C-4	19
Expense Detail - Other Professional Services	C-5	20
Expense Detail - General Services, Fiscal		
and Administrative Services	C-6	21
D. PROJECTED CHANGES IN REVENUE AND EXPENSE		
Summary of Changes in Revenue and Expense	D-1	22
The following will be submitted under separate cover, in work sheet form, or placed in a narrative for the utilization of the review agencies:		
Analysis of Changes in Revenue		
Changes in Deductions from Revenue		
Changes in Salaries and Wages		
Changes in Other Expense		
Changes in Employee Benefits		
E. COST FINDING		
Departmental Cost Finding Statement	E-1	23
F. SCHEDULE OF RATE CHANGES		
Schedule of Rate Changes	F-1	25

EXHIBIT B:
ACCOUNTING AND REPORTING MANUAL

REPORTING REQUIREMENTS

LIST OF REPORTING FORMS

J-010

<u>REPORT PAGE</u>	<u>TITLE</u>
1	Hospital Description
2	Services Inventory
3	Related Hospital Information
4	Balance Sheet - Unrestricted Fund
5	Balance Sheet - Restricted Fund
6	Statement of Changes in Equity
7	Statement of Income - Unrestricted Fund
8	Statement of Changes in Financial Position - Unrestricted Fund
9	Accounting Policies
10	Summary of Revenues, Expenses, and Statistics
11	Reclassification Worksheet
12	Patient Revenue and Units of Service
13	Deductions from Revenue
14	Other Operating Revenue
15	Physicians and Student Compensation Worksheet
16	Physicians and Student Compensation Worksheet
17	Trial Balance - Expense Worksheet
18	Trial Balance - Expense Worksheet
19	Cost Allocation Grouping Schedule
20	Cost Allocation - Statistical Basis
21	Cost Allocation
22	Depreciation Reconciliation
23	Depreciation Reconciliation
24	Detail of Direct Payroll Cost (Optional - See J-020.1)
25	Detail of Direct Payroll Cost (Optional - See J-020.1)
12a	Optional Detail - Patient Revenue and Units of Service
13a	Optional Detail - Deductions from Revenue
15a	Optional Detail - Physicians and Student Compensation Worksheet
17a	Optional Detail - Trial Balance - Expense Worksheet

In DHS Form 301, the hospital is asked to summarize its patient revenue, deductions from revenue, other revenue, expenses, and net revenue excess (deficit) for three time periods:

- the prior year
- the base year
- the projected year with variable items at:
 - existing rates
 - proposed rates for a given portion of the year
 - proposed rates annualized

In some schedules revenue and expense figures are also broken down by cost centers. Gross patient revenue, net patient revenue, cost, and net revenue per patient day are calculated for each of the five categories. Assets and liabilities are given for the base year and prior year in addition to a statement of changes in the fund balance or restricted fund balance. If several funds exist, a balance sheet is to be prepared for each fund. A departmental cost-finding statement giving the gross revenue, deductions from revenue, direct expenses, and indirect allocated expenses of each revenue-producing center is also included.

The DHS 301 filing package also asks the hospital to submit a narrative stating the reasons why the rate increase is needed and indicating the schedules in the package that support these reasons and conclusions. A statement of overall pricing policy and financial objectives of the institution must also be included. The current regulation on the preparation of the filing package offers a few illustrative examples of pricing policies:

- rates are set that will enable us to cover all operating expenses, including depreciation and interest, plus provide \$50,000 annually for our expansion fund.
- our prices must be at a level that will enable us to achieve our earnings objective of 10% before tax return on equity.
- rates should be adequate to cover cash operating expenses.

The new annual uniform reporting package includes a restricted and an unrestricted fund balance sheet, statements of changes in equity and in financial position; statement of income for the unrestricted fund; a summary

of revenues, expenses, and statistics for the revenue producing departments; a grouping schedule for cost allocation; and worksheets for reclassifications, cost allocation, depreciation reconciliation, and compensation of physicians and students. An optional form is provided for a detailed breakdown of direct payroll costs for each revenue and non-revenue producing cost center. In addition, an optional worksheet is provided to allow the hospital to report gross revenues and contractual allowances by department for Medicare, Medicaid (implementation date pending legislative action), and other.

These new annual reporting forms require more detail than DHS Form 301, but follow a similar format. The nature and organization of these financial reports will be described later in Section IV. Upon implementation of uniform reporting, in July 1976 DHS plans to redesign DHS Form 301 to eliminate areas of redundancy with the annual reports.

Physician Compensation

The new annual reporting package requests information on the nature of the financial arrangement between the physicians and hospital for the laboratory, radiology, E.K.G., E.E.G., and E.M.G. departments. For each of these departments and any other departments with similar arrangements, the hospital is to indicate if the arrangement is "agency, normal, contracted, rental, independent, salaried, or other."

The salaries, wages, and benefits paid to physicians and students as well as professional fee compensation are broken down for all revenue and non-revenue producing cost centers in the Physician and Student Compensation Worksheet. On this worksheet, "student" refers to the hospital's interns and residents as well as nursing and paramedical students. For each revenue or non-revenue center, the worksheet shows:

Column 1 - salaries, wages, and benefits paid to physicians and students (for salary and wages, the M.D. natural expense classification is .07 and the student's is .08; for fringe benefits the natural classifications are .10 through .19)

Column 2 - professional fees paid to physicians (natural expense classification .20)

Column 3 - total compensation (sum of 1 and 2)

Column 4-10 - reclassification of total compensation (column 3) according to percent of time spent by function.

Physician and student compensation is reclassified to show the amount paid to physicians, interns, and residents per cost center for care of hospital patients, research, educational activities, participation on hospital committees or in general hospital administration, supervisory and other functions in the department. The amount paid to nursing and paramedical students for care of hospital patients is also provided for each cost center.

It should be noted that while total compensation is broken down by function for each cost center, figures are not reported for individual physicians. However, the name, title or function, percent of customary work week devoted to business, percent ownership, and dollar amount of compensation for all owners of the hospital must be reported.

Scope and Quality of Hospital Services

The annual reporting package includes a detailed description of the hospital and an inventory of services, reproduced here as Exhibits C and D. The hospital must indicate the type of control under which it operates including whether it is owned by an individual, partnership, or corporation if it is investor owned. Type of care is listed as short-term, long-term, or university teaching with subdivisions for long and short term care. The presence of approved physician and nurse training programs and participation in government financing programs and other prepaid programs are indicated. The hospital is also asked to indicate if it has 24 hour coverage in the emergency room, psychiatric emergency room, operating room, lab services, and X-ray and whether a physician or pharmacist is on the premises at all times.

The hospital is also asked to give a profile of its active medical staff and its interns and residents. The number of board certified, board eligible, and other physicians by clinical speciality is given according to whether the physician is hospital based or not. Twenty-eight categories of clinical specialty including family practice, general practice, oncology, psychiatry, vascular surgery, etc., are given. The intern and residents profile gives the number of interns, externs, and residents in approved programs and the number of other residents according to the twenty-eight clinical specialties. (See Exhibit C.)

The bed complement and adult/pediatric patient days are given for medical, surgery, obstetrics, pediatric, and other clinical divisions. The available beds and patient days are subdivided into intensive, acute, long-term and other care. Licensed beds are also reported.

The services inventory in Exhibit D provides detailed data on the scope of daily hospital services, partial day care, home care services, emergency services, ancillary services, clinical services, medical education programs, and other services in the hospital. The hospital is asked to use a numerical code to indicate if the service is a separately organized, staffed, and equipped unit of the hospital; a service maintained in the hospital; a service not maintained in the hospital, but available from an outside contractor; a service not available; or a service provided in a clinic of the hospital.

Many of these items are already provided by the hospital to the AHA for its annual survey and to the state for the Hill-Burton Survey and Construction Act and licensing activities, and to local health planning councils for certificate of need applications. While this duplication may be considered wasteful, these outside reports do not yield the same level of detail and frequently use different definitions. This frustrates and often undermines attempts to integrate the data into the comprehensive format required by the reporting manual. It is intended, however, that the uniform reporting incorporate all the information requirements of DHS and the local health planning councils, thus representing the sole hospital information source to the health planning process.

EXHIBIT C:

HOSPITAL DESCRIPTION

1.

Health Care Institution _____

For Period from _____ to _____ I.D. Number _____

Do Not Use	
CMF	Region
District	Zone

Line No.	TYPE OF CONTROL	A	TYPE OF CARE	B	TEACHING PROGRAMS	C									
01	Church		Short Term - General		Approved Residency										
02	Non-profit Corp.		Short Term - Childrens		Approved Internship										
03	Non-profit Other		Short Term - Psychiatric		RN (Baccalaureate)										
04	Investor - Individual		Short Term - Specialty		RN - Other										
05	Investor - Partnership		Long Term - General		LPN Program										
06	Investor - Corporation		Long Term - Childrens												
07	State		Long Term - Psychiatric												
08	County		Long Term - Specialty												
09	City/County		University Teaching												
10	District														
11	GOVERNMENT PROGRAMS	D	PREPAID PROGRAMS	E	24 HOUR COVERAGE	F									
12	Medicare		Hosp. Based		Emergency Room										
13	Medicaid		Parent Org. Based		Psychiatric E.R.										
14	Crippled Childrens		State Contracts		Physician on Premises										
15	Other (Specify)		Federal Contracts		Pharmacist on Premises										
16			Medical Foundation Contracts		Operating Room										
17			Commercial Plan Contracts		Lab Services										
18			Other (Specify)		X-Ray Services										
19															
20	ACTIVE MEDICAL STAFF PROFILE MD's/DO's (ENTER NO.)				INTERN/RESIDENTS PROFILE (ENTER NO.)										
21			Hospital Based		Non-Hospital Based										
22	Clinical Specialty	Board Cert.*	Board Elig.*	Other* J	Board Cert.* K	Board Elig.* L	Other* M	Approved Programs							
23		G	H	J	K	L	M	Intern N							
24	Family Practice							Extern P							
25	General Practice							Resid. Q							
26	OB/GYN							Other Resid. R							
27	Pediatrics														
28	Psychiatry														
29	Oncology														
30	General Surgery														
31	Neurosurgery														
32	Thoracic Surgery														
33	Urology														
34	Cardiovascular Surgery														
35	Plastic Surgery														
36	Orthopedic Surgery														
37	Vascular Surgery														
38	Oral Surgery														
39	Internal Medicine														
40	Cardiology														
41	Gastroenterology														
42	Neurology														
43	Ophthalmology														
44	Dermatology														
45	Endocrinology														
46	Hematology														
47	Anesthesiology														
48	Radiology														
49	Pathology														
50	Podiatry														
51	Dental														
52	TOTAL														
53															
54			Available Beds					Adult/Pediatric Patient Days							
55	Clinical Divisions	Intensive 1	Acute 2	Long-Term 3	Other 4	Total 5	Licen. Beds 6	Avail. Bed Days 7	Intensive 8	Acute 9	Long-Term 10	Other 11	Total 12	Util. % 13	Dis-charges 14
56	Medical														
57	Surgery														
58	Obstetrics														
59	Pediatric														
60	Psychiatric														
61	Other														
62	TOTAL														
63	MISCELLANEOUS INFORMATION														
64	Chief Executive Officer:							Financial Officer:							
65	Address:							(City) (County) (Zip)							
66	(Street)							(City) (County) (Zip)							
67	Business Phone:							Date Submitted:							
68															
69															
70															

*See definition in instructions.

JUNE 1975

EXHIBIT D:

SERVICES INVENTORY

2. Health Care Institution _____ For Period from _____ to _____ I.D. Number _____

Line No.	HOSPITAL BASED SERVICES	(1)	(2)	CLINIC SERVICES	(3)	Line No.
01	DAILY HOSPITAL SERVICES					01
02	Coronary Intensive Care		Delivery Room Services	Cardiology		02
03	Pediatric Intensive Care		Labor Room Services	Chest Medical		03
04	Burn Intensive Care		Abortion Services	Communicable Disease		04
05	Medical Intensive Care		Dental Surgery	Dermatology		05
06	Surgical Intensive Care		Podiatry Surgery	Diabetes		06
07	Newborn Intensive Care		Urologic Surgery	Allergy		07
08	Isolation Intensive Care		Otolaryngologic Surgery	Metabolic		08
09	Psychiatric Isolation I.C.		Plastic Surgery	Neurology		09
10	Pulmonary Intensive Care		Surgical Day Care (One Day)	Pediatric		10
11	Communicable Disease Isola. Care		Gynecologic Surgery	Neonatal		11
12	Protective Isolation Care		Kidney Transplant Services	Psychiatric		12
13	Definitive Observation Care		Open Heart Surgery Services	Obstetrics		13
14	Drug Abuse Care		Heart Cath/Sterile Room Service	Hypertension		14
15	Alcoholism Care		Cystoscopy Service	Rheumatic		15
16	I.P. Care Under Custody (Jail)		Neurological Surgery	Renal		16
17	Metabolic Care		Ophthalmologic Surgery	Orthopedic		17
18	Newborn Nursery Care		Orthopedic Surgery	Trauma Ortho		18
19	Mental Retarded Nursery Care			Ophthalmology		19
20	Premature Nursery Care		Anesthesia Services-Surgical	Otolaryngology		20
21	Stroke Care		Anesthesia Services-Obstetrics	Podiatry		21
22	Neonatal Acute Care		Anatomic Pathologic Services	Dental		22
23	Post Partum Care		Hematologic Services	Alcoholism		23
24	Psychiatric Acute Care		Clinical Chemistry Services	Child Diagnosis		24
25	Pediatric Acute Care		Serologic Services	Child Treatment		25
26	Geriatric Acute Care		Urinalysis Services	Drug Abuse		26
27	Medical Acute Care		Microbiologic Services	Family Therapy		27
28	Surgical Acute Care		Necropsy Services	Group Therapy		28
29	Skilled Nursing/Extended Care		Pulmonary Lab Services			29
30	Psychiatric Long-Term Care		Organ Bank	OTHER SERVICES		30
31	Tuberculosis Long-Term Care		Blood Bank	Toxicology/Antidote Info		31
32	Intermediate Care		Electroencephalography	Drug Reaction Info		32
33	Rehabilitation Care		Electrocardiography	Cancer/Tumor Registry		33
34	Residential/Custodial Care		Electroencephalography	Family Planning		34
35	Mental Retardation Care		X-ray Examination	Genetic Counseling		35
36	Self Care		X-ray Therapy	Dietetic Counseling		36
37			Cobalt Therapy	Parent Training Class		37
38			Radium Therapy	Diabetic Training Class		38
39	PARTIAL DAY CARE		Diagnostic Radioisotope	Public Health Class		39
40	Psychiatric Night Care		Therapeutic Radioisotope	Medical Research		40
41	Psychiatric Day Care		Pharmacy W/PT Reg. Pharmacist			41
42			Pharmacy W/PT Reg. Pharmacist	MEDICAL EDUCATION PROGRAMS		42
43	HOME CARE SERVICES		Clinical Pharmacologic Services	Clinical Residency		43
44	Home Physical Medicine Care		Psychopharmacological Therapy	Clinical Internship		44
45	Home Social Service Care		Shock Therapy	Clinical Externship		45
46	Home Dialysis Training		Physical Therapy	Physicians Assistant		46
47	Jail Care		Occupational Therapy	RN		47
48	Psychiatric Foster Home Care		Speech Therapy	LPN		48
49	Home Nursing Care		Rehabilitation Therapy	Nurse Anesthetist		49
50			I.V. Therapy	Medical Technologist		50
51	EMERGENCY SERVICES		Psychiatric Therapy	Inhalation Therapist		51
52	Emergency Room Service		Clinical Psychologist Services	Occupational Therapist		52
53	Ambulance Service		Vocational Services	Pharmacist Intern		53
54	Mobile Cardiac Care Service		Inhalation Therapy	Physical Therapist		54
55	Psychiatric Emergency Service		Hyperbaric Chamber Services	Radiologic Technologist		55
56	Emergency Observation Service		Blood Collection and Processing	Dietetic Intern		56
57	Emergency Communications System		Sheltered Workshop	Administration Resident		57
58	Trauma Treatment E. R.		Pharmacy Unit Dose System	Medical Records Tech.		58
59	Orthopedic Emergency Services		Pharmacy I.V. Additive Program	Social Worker		59
60	Radioisotope Decontamination					60
61						61
62						62
63						63
64						64

CODE (See further definition in instructions)

JUNE 19;

- 1 - Separately Organized, Staffed, and Equipped Unit of Hospital.
- 2 - Service Maintained in Hospital.
- 3 - Service Not Maintained in Hospital but Available From Outside Contractor or Other Hospital.
- 4 - Service Not Available.
- 5 - Special Code for Clinic Services Section of Column 3.

The hospitals' accreditation status by JCAH or AOA is not reported and data from medical audits are not included. A comprehensive peer grouping is now being developed which will be used in the reporting of statistics received under the annual reporting requirement and for rate review purposes.

The DHS 301 form for rate increase requests does not require the detail of the manual's reporting package. DHS 301 simply asks if the hospital is classified as non-profit, proprietary, or government; general or special; and acute or long term. Nursing school affiliation, medical school affiliation, residency program, internship program, and in-service training program are checked, if present. In-patient days and occupancy rate for medical and surgical, obstetrics, pediatrics, and other are requested for the projected year, base year, and the prior year. Total admissions, out-patient clinic visits, emergency room visits, and average length of stay are requested for the same time periods. Total beds available and number of licensed beds are also requested. The number of full-time equivalent employees at the end of each of the periods is requested and should be supplemented by a detailed schedule by department. The hospital can, of course, provide any supplementary information it desires.

The absence of detailed scope of service and quality data on DHS 301 reflects the fact that the rate review process does not take this type of factor into account when assessment is made of the hospital's proposed increase. The rate review process is primarily concerned with changes in price and volume of services.

Case Mix and Patient Data

At present, the Arizona Department of Health Services (DHS) has no access to patient discharge abstract data to yield profiles on the case mix brought to different hospitals, procedures performed, etc. The University of Arizona has a contract with the National Center for Health Statistics (NCHS) for a Cooperative Health Statistics System (CHSS) research and

development project on the hospital care component. The contract terminates in June 1976 and DHS has submitted a new planning and development contract proposal to NCHS to develop a hospital discharge data system.

Data for Rate Adjustments Related to Hospital Expansion

The annual reporting package does not call for a narrative statement of the hospital's short and long term facilities and program expansion plans or ask for a three year capital budget. However, schedule B-6 of DHS Form 301 calls for a description and the cost of any additions to property, plant, and equipment with a value of over \$15,000. Additions of less than \$15,000 may be combined and shown as "other additions." The total amount of property additions and long-term debt are requested for the prior year, base year, and projected year. In addition to Schedule B-6, expansions can be partially identified by comparing the base year figures to projected year figures, but this method does not distinguish between differences stemming from volume or price changes and those stemming from expansions.

Since the local health planning agency serves as the local review body for both certificate of need and rate review in Arizona, any pending certificate of need application and its related documentation is taken into consideration during the rate review process. This close relationship between certificate of need and rate review activities also occurs at the state level since DHS has final responsibility for both certificate of need authorization and issuance of rate review findings.

Integration of the rate review and planning process has many advantages. The tie-in provides information that would be difficult to develop if the functions were performed separately. For example, when new or changed services or an expansion project are listed in the rate increase application, they can easily be checked to ascertain whether a certificate of need has been issued. It was pointed out that in its rate increase application a hospital may paint a bleak financial picture (such as, utilization is down and more dollars are needed) to justify its proposed increase, but

in its certificate of need application, this same hospital wants to present an optimistic picture (such as utilization is up and hospital is overflowing) to show its financial capability and need for expansion. Linking the data in the two applications allows DHS and the local planning agency to identify the discrepancies and obtain a more realistic picture of the hospital's financial status.

Economic Trend Indicators

The Bureau of Health Economics of DHS has employed a health economist to conduct economic studies related to health care delivery. Under his direction, inflation impact factors are maintained on each category of major hospital expense. This information can be used in evaluating the reasonableness of a hospital's proposed rate increase in relation to inflation of input prices.

The Consumer Price Index (CPI) and Wholesale Price Index (WPI) are used to predict national trends while information published by the Arizona State University (ASU) Bureau of Business and Economic Research is used to indicate local price trends. The latter information includes an adjustment of the CPI to reflect the Phoenix metropolitan area experience.

The development of economic trend indicators is now a joint effort between the Bureau of Health Economics, ASU's Bureau of Business and Economic Research, and staff economists from several large hospitals. Results of this work are available to health care institutions for budget and rate planning purposes. Such a supportive role is thought to be useful to the health care industry and to help keep price increases in line with actual inflationary influences. It is also deemed that such support is critical to the success of a voluntary compliance review process.

Historical Data

Since the establishment of the rate review program in 1972, hospitals have been required to file an application each time a rate increase is planned and an annual certified financial report 120 days after the close of each fiscal year. Since most of Arizona's 70 hospitals have applied for at least one rate increase per year, the data base of hospital rate schedules and financial and operating statistics now encompasses a period of over four years for Arizona's hospital industry.

As noted earlier, for fiscal years beginning before July 1, 1976, hospitals were also required to submit the operating and financial statement (DHS 201) and an annual report including an income statement, balance sheet, statement of changes in financial position, and a cost finding statement indicating direct and indirect costs for each revenue center. However, the cost finding data has generally been waived when the requirement represented an undue burden to the hospital. DHS Form 201 is now a three page form requesting inpatient and outpatient revenue by revenue center; salaries and other direct expenses for major departments and categories, such as employee health and welfare or depreciation; and bed count, bed complement, bed count days, census days, number of discharges, and discharge days by clinical case unit. These data are available for 1972-1976; they will be expanded when the new manual reporting requirements are implemented for fiscal years commencing on or after July 1, 1976.

Current Year Monitoring

The Arizona Department of Health Services does not monitor hospital performance during the year except in cases of alleged violations of the review process. In such cases, the Department can exercise audit authority pursuant to A.R.S. §36-125.03-D.

III. HOW THE REPORTS WERE DEVELOPED

In order to assure uniformity of accounting and reporting procedures, the Department of Health Services authorized the development and publication of the Arizona Hospital Accounting and Reporting Manual. As previously noted, beginning in July 1976, the accounting and reporting procedures contained within the manual will be required of all non-federal hospitals operating within the state of Arizona. The Department's regulations provide⁵ for a compliance extension procedure to alleviate hardship situations during the conversion period.

The Accounting and Reporting Manual was developed by Ernst and Ernst under contract with DHS and with the consultation of officials in the Department of Health Services, hospitals, the Arizona Hospital Association, the Hospital Financial Management Association, and other interested organizations. Having recently completed a similar assignment for the California Health Facilities Commission, Ernst and Ernst was able to borrow heavily from the California materials. As a result, the Arizona system maintains compatibility with the California system and the Washington system, also modeled after California. A review was also made of the procedures followed in other states including Nebraska, New Jersey, New York, Indiana, Connecticut, and Maryland as well as Canada. Certain features of many of these systems were also incorporated into the manual.

The draft of the manual was completed on June 30, 1974 and implemented in 1976, with the reporting requirements due 120 days after the close of each hospital's fiscal year. All hospitals are required to report to the Department in accordance with the system of accounts outlined. About 40% of the hospitals will implement the system on July 1, 1976 and another 40% on January 1, 1977. The remaining 20% of the hospitals have fiscal years that commence at other times throughout the year. The first annual reports from hospitals for fiscal year ending dates on or after June 30, 1977 will be due at the Department between October 31, 1977 and July 31, 1978.

Introducing the New Accounting and Reporting System

At the annual meeting of the Arizona Hospital Financial Management Association in May, 1975, educational seminars on the proposed Hospital Accounting and Reporting Manual were conducted for hospital representatives. After modifications were made in the manual during the summer of 1975, all hospitals were sent a copy of the final version of the manual in October 1975. Regulations adopting the manual and establishing operating procedures thereunder were adopted in December, 1975. In June, 1976, regional workshops were conducted by Ernst and Ernst to train hospital representatives in the use of the manual and reporting forms.

IV. CHARACTERISTICS OF THE BASIC REPORTING SYSTEM

Arizona's uniform chart of accounts and reporting requirements are set forth in a manual similar to the Washington and California manuals in its organization and detail.* Although the accounting and reporting concepts in the manual are set down along functional lines, every attempt has been made to minimize the differences between the hospital's internal responsibility accounting and reporting and the Department's functional reporting requirements. Where differences occur, reclassifications are necessary to bring the hospital's records in conformance with the Department's reporting requirements.

The manual sets forth the accounting concepts and principles to be followed and outlines and describes the system of accounts to be used in the compilation of financial data on the hospital's assets, liabilities, capital, revenues, and expenses. (See Exhibit E.) The numerical coding system is explained and a detailed description of the nature and content of each account is presented.

* The similarities between the two manuals can be noted by comparing this section to Section IV of the Washington Information System Report.³

EXHIBIT E: ACCOUNT TITLES FROM
ARIZONA CHART OF ACCOUNTS

Chart of Accounts - Balance Sheet.....	
Unrestricted Fund Assets.....	
Current Assets.....	
Board Designated Assets.....	
Property, Plant, and Equipment.....	
Investments and Other Assets.....	
Intangible Assets.....	
Plant Replacement and Expansion Fund Assets.....	
Specific Purpose Fund Assets.....	
Endowment Fund Assets.....	
Unrestricted Fund Liabilities.....	
Current Liabilities.....	
Deferred Credits.....	
Long-Term Debt.....	
Plant Replacement and Expansion Fund Liabilities.....	
Specific Purpose Fund Liabilities.....	
Endowment Fund Liabilities.....	
Due to Other Funds.....	
Non-Current Liabilities.....	
Fund Balances.....	
Non-Profit.....	
Investor-Owned - Corporation.....	
Investor-Owned - Partnership.....	
Chart of Accounts - Income Statement.....	
Revenue Accounts.....	
Daily Hospital Services Revenue.....	
Ancillary Service Revenue.....	
Other Operating Revenue.....	
Deductions From Revenue.....	
Expense Accounts.....	
Daily Hospital Services Expense.....	
Ancillary Service Expense.....	
Research Costs.....	
Education Costs.....	
General Services.....	
Fiscal Services.....	
Administrative Services.....	
Unassigned Costs.....	
Non-Operating Revenue and Expenses.....	

Source: Section C, Hospital Accounting and Reporting Manual, Arizona
Department of Health Services, 1975.

The numerical coding system in the chart of accounts provides for six digits, and a hospital may add additional digits if it desires. The four digits to the left of the decimal point identify primary account classifications and the two digits to the right identify secondary account classifications. The first digit of an account designates the financial statement classification of the account, as follows:

- 1 - Assets
- 2 - Liabilities and Capital or Fund Balance
- 3 - Daily Hospital Services Revenue
- 4 - Ancillary Services
- 5 - Deductions from Revenue and Other Operating Revenue
- 6 - Daily Hospital Services Expenses
- 7 - Ancillary Expenses
- 8 - Research Costs; Education Costs; General Services; Fiscal Services; Administrative Services; Unassigned Costs.
- 9 - Non-operating Revenue and Expenses

The second, third, and fourth digits identify the hospital service centers and ancillary centers to which both revenue and expenses are to be reported. Accounts with titles in capital letters and a fourth digit of zero must be reported to the Department in the annual report.

The Account Classification

Each of the Balance Sheet Accounts and Income Statement Accounts are set forth and described in the manual. Section C-000 of the manual contains the Chart of Accounts, listing the account titles and related numerical systems to be used in the compilation of financial data. The Chart of Accounts is divided into two parts: the Chart of Accounts--Balance Sheet, and the Chart of Accounts--Income Statement. Exhibit E shows the primary and secondary accounts for each part.

EXHIBIT F: BALANCE SHEET ACCOUNT DESCRIPTIONS - ILLUSTRATIVE EXAMPLE

1240 - 1249 EQUIPMENT

1241.00 Major Movable Equipment

Equipment to be charged to this account has the following general characteristics:

1. Ability to be moved, as distinguished from fixed equipment.
2. A more or less fixed location in the building.
3. A unit cost large enough to justify the expense incident to control by means of an equipment ledger.
4. Sufficient individuality and size to make control feasible by means of identification tags.
5. A minimum life of, usually three years or more.
6. Used in hospital operations.

Major movable equipment includes such items as automobiles and trucks, desks, beds, chairs, accounting machines, sterilizers, operating tables, oxygen tents and X-ray apparatus.

1242.00 Minor Equipment

Equipment to be charged to this account has the following general characteristics:

1. Location generally not fixed; subject to requisition or use by various departments of the hospital.
2. Relatively small size.
3. Subject to storeroom control.
4. Fairly large number in use.
5. A useful life of usually three years or less.
6. Used in hospital operations.

Minor equipment includes such items as wastebaskets, bed pans, syringes, catheters, basins, glassware, silverware, pots and pans, sheets, blankets, ladders and surgical instruments.

EXHIBIT G:

ACCOUNTING AND REPORTING MANUAL

INCOME STATEMENT ACCOUNT DESCRIPTIONS

(ILLUSTRATIVE EXAMPLE)

(7030) Surgical Day Care

Function

Surgical Day Care services are provided to outpatients by specifically trained nursing personnel who assist physicians in the performance of surgical and related procedures both during and immediately following surgery. Additional activities may include, but are not limited to, the following:

Comforting patients in the operating room; maintaining aseptic techniques; scheduling operations in conjunction with surgeons; assisting surgeon during operations; preparing for operations; cleaning up after operations to the extent of preparation for pickup and disposal of used linen, gloves, instruments, utensils, equipment, and waste; arranging sterile setup for operation; assisting in preparing patients for surgery; inspecting, testing and maintaining special equipment related to this function; preparing patient for transportation to recovery room; counting of sponges, needles, and instruments used during operation; enforcing of safety rules and standards; monitoring of patient while recovering from anesthesia.

Description

This cost center contains the direct expenses associated with a separately identifiable outpatient surgery room. When a common operating room is used for both inpatients and outpatients, the direct costs for both should be accumulated in the "Surgery and Recovery" cost center. Included as direct expenses of the "Surgical Day Care" cost center are: salaries and wages, employee benefits, professional fees, supplies, purchased services, other direct expenses and transfers.

Standard Unit of Measure: Number of Operating Minutes

Operating minutes is the difference between starting time and ending time defined as follows:

Starting time is the beginning of anesthesia (or surgery if anesthesia is not administered).

Ending time is the end of anesthesia (or surgery if anesthesia is not administered).

Data Source

The number of operating minutes shall be an actual count obtained from the surgery room operating log.

Section D-000 of the manual provides descriptions of the Balance Sheet Accounts while Section E-000 provides descriptions of the Income Statement Accounts. As illustrated in Exhibits F and G, the descriptions define the particular item or function to be embraced by each account. For the Income Statement Accounts, the standard unit of measure to be employed and the source of the data to be reported are also given.

The manual's account distribution index provides further detail by listing various types of supplies and services and the cost center and natural classification to which they should be charged as expenses. The account distribution index therefore serves as a reference guide to give the hospitals the proper classification of supplies and services expenses. To illustrate, the following items in Exhibit H have been selected from those listed under the letter B in the index:

EXHIBIT H: EXCERPT FROM ACCOUNT DISTRIBUTION INDEX

<u>Item</u>	<u>Cost Center</u>		<u>Natural Classification</u>	
	<u>Title</u>	<u>Code</u>	<u>Code</u>	<u>Title</u>
Blades, surgical	Appropriate Surgery Cost		.34	Surgical Supplies - General
Blankets	Laundry and Linen	8350	.44	Linen and Bedding
Blood for patients	Blood Banks	7100	.41	Other Medical Care Materials
Blood for employees	Cost Center to which employee is assigned		.17	Other Employee Benefits
Blood Derivatives	Blood Banks	1700	.41	Other Medical Care Materials
Blood type tests, purchased	Laboratory - Clinical	7060	.61	Purchased Services - Medical
Blow Bottles	Using Cost Center		.50	Other Non-Medical Supplies
Bond, underwriting & issuance cost	Appropriate Balance Sheet Account	8870	.84	Other Unassigned Costs
Bonding Insurance Premiums, employees	Appropriate Cost Center		.82	Insurance - Other
Bond Interest expense	Interest - Other	8870	.84	Other Unassigned Costs
Bookkeeping forms	General Accounting	8510	.46	Office and Administrative supplies

As shown in Exhibit H, some of the items listed are not referenced to a single cost center, but to the "Using" or "Appropriate" cost center. These types of items are commonly used in more than one cost center and therefore the manual requires that the item's cost be recorded directly or by inter-departmental transfer in the using cost center.

The Natural Expense Categories

The seven major categories of natural expense prescribed by the manual are:

- salaries and wages
- employee benefits
- professional fees
- supplies
- purchased services
- other direct expenses
- transfers

Each of the seven major categories is divided into additional subcategories. For example, the category salaries and wages is divided into:

- management and supervision
- technician and specialist
- registered nurses
- licensed practical nurses
- aides and orderlies
- clerical and other administrative
- environmental and food service
- physicians
- other salaries and wages
- vacation, holiday, and sick leave

Statistical Units of Measure

The purpose of the Standard Unit of Measure is to provide a uniform statistic for measuring costs. The standard unit of measure is used to measure the volume of services rendered to patients for revenue-producing cost centers and the volume of support services rendered for non-revenue producing centers. The Standard Units of Measure for each cost center required to be reported are shown in Exhibit I.

EXHIBIT I: STANDARD UNITS OF MEASURE

COST CENTER

STANDARD UNITS OF MEASURE

DAILY HOSPITAL SERVICES

All 14 Centers except
Nursery Acute
Nursery Acute

Number of Patient Days

Number of Newborn Patient Days

ANCILLARY SERVICE

Labor and Delivery

Number of Deliveries

Surgery and Recovery

Number of Operating Minutes

Surgical Day Care

Number of Operating Minutes

Anesthesiology

Number of Operating Minutes

Central Services and

Supplies

Number of Line Items Sold

Laboratories - Clinical

Workload Measurement Units

Laboratories - Pathological

Workload Measurement Units

Laboratories - Pulmonary

Function

Workload Measurement Units

Blood Bank

Units of Blood Issued

Electrocardiology

Number of Procedures

Electromyography

Number of Procedures

Electroencephalography

Number of Procedures

Radiology - Diagnostic

Relative Value Units

Radiology - Therapeutic

Relative Value Units

Nuclear Medicine

Relative Value Units

Pharmacy

Number of Line Items Sold

Inhalation Therapy

Number of Treatments

Dialysis

Number of Hours of Treatments

Physical Therapy

Number of Treatments

Occupational Therapy

Number of Treatments

Emergency

Number of Visits

Ambulance

Number of Occasions of Service

Psychiatric Emergency Room

Number of Visits

Clinics

Number of Visits

Home Health Services

Number of Home Health Patient
Contacts

Cost-Finding Statistics

Cost-finding statistics are used as the basis for measuring the amount of service rendered by each non-revenue producing center to the other non-revenue producing centers and to the revenue producing centers. The manual specifies the sequence to be used in the cost allocation as well as the statistical basis for cost allocation.* For example, the manual requires that housekeeping costs be allocated to the other centers on the basis of square feet while medical records costs be allocated on the basis of gross patient revenue.

In addition, for each cost finding statistic, the manual provides the definition or method of computation to be used and the source of the statistic. For example, gross patient revenue is defined as the "gross patient revenue of each revenue-producing center" and the source is given as the general ledger.

V. VALIDATING, MANAGING, AND USING THE INFORMATION

Since the new reporting requirements under the manual had not yet been implemented as of the date of this writing, the processes for validation, management, or use of the data had not yet been fully determined. However, DHS 301, the rate increase filing package, has been in use since 1973. This section will therefore briefly review the validation, management and use of the data from DHS 301.

Validation of the Data

There is no formal audit of the data submitted by hospitals on DHS 301, although information can be cross-checked with other available sources, such as previous filings, the audited financial report, certificate

* The statistics for cost finding should not be confused with the standard units of measure described in the preceeding section.

of need applications, etc. The state has the authority to audit the data if it so chooses, but thus far has not had the staff or budgetary appropriation to support the auditing function adequately. Nor does such support for auditing appear to be forthcoming in the future. The DHS Bureau of Health Economics reports that one additional staff position (statistical clerk) was obtained for F/y 1976-77 with great difficulty; an accountant position was denied. The Bureau's current professional staff of a supervisor, an economist, and two accountants cannot be expected to audit the data submitted by Arizona's 70 hospitals and 65 nursing homes in addition to processing rate increase applications and implementing the new uniform accounting and reporting system.

Processing and Managing the Data

Hospitals submit DHS 301 directly to both the Department of Health Services and the local planning agency. (The annual reports set forth in the manual will be submitted directly to the Department of Health Services.) All analysis of the rate increase filing package is done manually. There has been discussion of computerizing the system but, to date, no action. The Bureau of Health Economics is currently developing specifications and the estimated resources for an automated system of processing data received from the annual reporting, and disseminating the resulting information reports as indicated, along the lines of the current California public disclosure activity. In event the necessary resources for this activity are denied, the Bureau of Health Economics plans to recommend drastic reductions in the annual reporting requirements.

Analytic Reports

In reviewing the rate increase applications of individual hospitals, the Bureau of Health Economics examines data from the hospital's DHS Form 301 reporting package to assess:

- percentage and dollar changes in gross patient revenue and net income/(loss) as a result of rate change
- history of previous increases
- adequacy of financial disclosure
- the hospital's need for the increase
- the relationship of proposed rates and charges to those of comparable institutions
- the relationship of the proposed rates and charges to the hospital's operating income and expense

The staff projects the impact of the proposed rate increase on the hospital's annual financial status. The number of beds, occupancy rate, and average number of unused beds in Medical and Surgical, Obstetrics, Pediatrics, and ICU/CCU are also assessed. Exhibit J illustrates the statistics developed in an analysis of a hospital's filing for a rate increase. In this type of analysis the hospital is compared statistically to the average for four other hospitals of similar size and in similar locations.

In addition to the manually prepared analyses and findings on individual hospital applications for rate increase, the Bureau of Health Economics produces monthly aggregate data on rate review activity in Arizona and a semi-annual comparative study of rates and charges in Arizona health care institutions. The monthly reports provide local health planning agencies updated year-to-year information on applications for rate increases and the findings issued by reviewing agencies. The tables include data on additional revenues projected to result from rate increases proposed or supported. The projected annualized patient revenue is given for each hospital on the basis of existing rates, proposed rates, recommended rates, and implemented rates. The dollar amount and percentage increase between the existing rates and implemented rates are also provided. The tables identify each institution by name.

EXHIBIT J: ILLUSTRATION OF
Analysis of Proposed Rate Increase for
Tucson Medical Center

1. Rate Comparison - Selected Services

1. Rate Comparison - Selected Services	Sample Statistics *						
	Applicant			% Difference			
	Exist. Rate	Prop. Rate	% Increase	Avg. Rate	Prop. to Avg. Rate	Range of Rates High Low	
<u>Daily Room Charges</u>							
Private	\$76.00	\$83.00	9.2	\$85.75	(3.2)	\$88.00	\$82.00
Semi-private	63.00	73.00	15.9	76.00	(3.9)	79.00	72.00
Ward	58.00	68.00	17.2	70.50	(3.5)	75.00	66.00
Nursery	48.00	57.00	18.8	46.17	23.5	55.00	38.50
ICU w/monitor	175.00	196.00	12.0	188.73	3.9	204.93	175.00
<u>Other Room Charges</u>							
Cardiovascular	245.00	316.00	29.0	236.67	33.5	285.02	200.00
Surgery - major (1st hour)	88.00	92.00	4.5	106.15	(13.3)	118.00	96.80
Surgery - minor (1st hour)	64.00	68.00	6.2	79.81	(14.8)	84.00	71.50
Labor & delivery	109.00	122.00	11.9	150.50	(18.9)	175.00	127.75
Emergency room (basic)	12.00	14.00	16.7	18.75	(25.3)	21.00	16.00
EEG	35.00	40.00	14.3	62.00	(35.5)	68.25	54.50
<u>Radiology</u>							
Chest - 1 view	11.00	12.00	9.1	13.61	(11.8)	15.05	10.50
Upper GI series	38.50	42.00	9.1	47.06	(10.8)	60.25	31.24
IVP Pyelogram	41.30	45.00	9.0	47.35	(5.0)	60.25	32.40
<u>Inhalation Therapy</u>							
IPPB (Rx)	6.00	7.25	20.8	6.69	8.4	8.00	5.00
PO ₂ Monitoring	new	30.00	-	**			
<u>Physical Therapy</u>							
1 modality	7.20	7.60	5.6	8.09	(6.1)	10.00	6.85

* Hospitals used in sample statistics:

Hospital	Location	# Beds	Effective Date of Price Schedule
Good Samaritan	Phoenix	695	12-74
St. Joseph's	Phoenix	560	7-75
St. Joseph's	Tucson	323	Proposed
St. Luke's	Phoenix	420	2-75

** Comparative statistics not available

EXHIBIT J (Continued)

2. Operating Statistics

	Actual F/Y 1974	Estimated F/Y 1975	Projected F/Y 1976
Inpatient days	182,965	184,827	185,287
Admissions	24,347	24,004	24,063
Outpatient Clinic Visits	23,632	26,498	27,823
Emergency Room Visits	24,886	24,250	24,250
Average Length of Stay (days)	7.6	7.7	7.7
Licensed Beds	557	557	557
Occupancy Rate (%)	90.0	90.9	91.1
Full Time Equivalent (FTE) Employees	1,781.8	1,940.3	1,977.6
FTE per Occupied Bed	3.6	3.8	3.9
Average Age Accounts Receivable (days)	67.2	64.5	64.5
Working Capital Ratio	3.1:1	3.8:1	-

3. Financial Statistics(a) Annual Results

	(\$ in 000)				
Actual	Gross Patient Revenue	Revenue Adjustment	Other Revenue	Expense	Net Income/ (Loss)
F/Y 74	\$27,918	\$(2,637)	\$537	\$24,965	\$ 853
Estimated F/Y 75	32,409	(3,313)	580	28,630	1,046
Projected F/Y 76					
Existing Rates	33,951	(2,535)	588	32,964	(960)
Proposed Rates Annualized	37,649	(3,974)	664	32,964	1,375

(b) Statistics per Inpatient Day(1) Year Comparison

	Actual F/y 74	Estimated F/Y 75	Projected F/Y 76	
			Existing Rates	Prop. Rates Annualized
Gross Patient Revenue	\$152.59	\$175.35	\$183.24	\$203.19
Net Patient Revenue	138.17	157.42	169.55	181.74
Expense	136.45	154.90	177.91	177.91
Net Income/(Loss)	4.66	5.66	(5.18)	(7.42)

EXHIBIT J (Concluded)

(2) Comparison to Sample Average

	<u>Applicant</u>	<u>Avg. Rate</u>	<u>Sample</u>		
			<u>% Difference</u> <u>Prop. to Avg.</u> <u>Rate</u>	<u>Range of Rates</u> <u>High</u> <u>Low</u>	
Gross Patient Revenue	\$203.19	\$206.53	(1.6)	\$222.16	\$173.30
Expense	177.91	177.91	-0-	189.50	158.75

(c) Expense Detail

(\$ in 000)

	<u>Estimated</u> <u>F/Y 1975</u>	<u>Projected</u> <u>F/Y 1976</u>	<u>Changes</u>					
			<u>Total</u>		<u>due to price</u>		<u>due to volume</u>	
			<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>
Salaries & Wages	\$16,214	\$18,172	\$1,958	12.1	\$1,483	9.2	\$475	2.9
Employee Benefits	2,182	2,555	373	17.1	205	9.4	168	7.7
Other Expense	8,818	10,774	1,956	22.2	1,143	13.0	813	9.2
Depreciation	1,087	1,162	75	6.9			75	6.9
Interest	329	301	(28)	(8.5)			(28)	(8.5)
Total Expense	<u>\$28,630</u>	<u>\$32,964</u>	<u>\$4,334</u>	<u>15.1</u>	<u>\$2,831</u>	<u>9.9</u>	<u>\$1,503</u>	<u>5.2</u>

(d) Changes in Financial Position

(\$ in 000)

	Actual	Estimated	Projected F/Y 1976	
	F/Y 74	F/Y 75	Existing Rates	Proposed Rates Annualized
SOURCE OF FUNDS:				
Net Income/(Loss)	\$853	\$1,046	\$(960)	\$1,375
Depreciation	991	1,087	1,162	1,162
Decrease in Board Designated Funds	906	633	2,100	1,948
Amortization of Bond Issue Discount & Expense	19			
Contributions & Investment Income	332	288	187	287
	<u>\$3,101</u>	<u>\$3,054</u>	<u>\$2,489</u>	<u>\$4,772</u>
APPLICATION OF FUNDS:				
Plant, Property, and Equipment	1,752	1,640	\$2,910	\$2,910
Increase in Board Designated Funds	380	750	-0-	1,162
Reduction in Long-Term Debt	400	400	400	400
Increase (Decrease) in Working Capital	569	264	(821)	300
	<u>\$3,101</u>	<u>\$3,054</u>	<u>\$2,489</u>	<u>\$4,772</u>

Finally, a comparative study of rates and charges of health care institutions in Arizona is published at least annually pursuant to ARS §36-436D. For hospitals, 20 representative rates and charges are reported with hospital groupings by region and bed size categories (less than 50 beds, 50-199 beds, 200-399 beds, and 400 and over beds). The rates and charges for the individual institution and the mean of the bed size group are given for: private room, semi-private room, ward room, regular nursery, ICU with monitor, major surgery for first hour, minor surgery for first hour, labor and delivery room, emergency room, EEG, EKG, lab-CBC, lab-RVU, radiology--1 chest view, radiology--upper GI series, radiology--IVP, inhalation therapy, nuclear medicine--brain scan, nuclear medicine--lung scan, and physical therapy. In addition to the mean, the lowest and highest charge for each category is displayed. It should be recognized, however, that due to differences between institutions in services provided within a given rate structure, the rates and charges reported may not be fully comparable. The institution of uniform definitions with the implementation of the new accounting system should help to improve their comparability.

In addition, in 1975 the Bureau of Health Economics produced a special report entitled: "Health Care Costs: The United States and Arizona (1970-1975)." This report analyzed the inflationary trends in the United States throughout the general economy and the health sector, and compared the national experience to that of Arizona. On the basis of this report, the Bureau projected decreases in the inflation rate for Arizona and Maricopa County in 1976.

VI. APPRAISAL OF THE PRESENT INFORMATION SYSTEM

Since the Arizona uniform accounting and reporting system had not been implemented at the time of this writing (May, 1976) it is not possible to assess the quality or utility of the information system that will result. However, the similarities of the new Arizona system to the Washington State uniform accounting and reporting system and the four years of data collection with Arizona DHS Form 301 and the old DHS 201 annual reports permit some observations to be made.

Relation of Information to Program Objectives

As we have seen, the primary objective of the Arizona rate review program is to focus public attention on hospital rate increases through the mandatory review. Public scrutiny coupled with the requirement that hospitals justify their proposed increases to the state Department of Health Services and local health planning agencies are expected to provide an incentive for improvement of internal management and cost containment.

Later this year, implementation of uniform accounting and reporting on a functional basis will promote the public disclosure objective by allowing inter-institutional unit cost comparisons to be made. However, one could argue that unless the Bureau of Health Economics has adequate staff and sufficient funds for automation and analysis of the data, it may remain largely unused. Furthermore, until cost containment objectives are more clearly delineated, the data required in the year-end reports may well be broader in scope and more detailed than is needed for the purposes at hand.

Strengths and Limitations of the Information System

As we have seen, the Arizona rate review system is unique in its use of local planning agencies for both rate review and certificate of need activity. However, in contrast to the New York, Washington, Maryland, and Massachusetts systems reviewed in the other working papers of this series, the Arizona system is a rate review instead of a rate setting system. The review process is a reactive one--the hospital seeking to increase its rates initiates the review process and establishes the new rate level, and the reviewer determines whether it is acceptable. In rate setting, the rate is established by the outside authority, not the hospital. Therefore, in the rate setting process, the outside agency needs a much more detailed and finely tuned system in order to obtain the information necessary to set rates.

The limited scope of information requested in DHS 301 is reflective of the less rigorous information demands of a rate review system. However, the reporting requirements for the new uniform accounting and reporting system are modeled on the information needs of more sophisticated rate setting states, such as Washington. Unless more detailed rate setting functions are anticipated in Arizona, one must consider whether the enormous detail requested on the year-end reports is cost beneficial.

Exhibit K summarizes certain general observations on some strengths and limitations of the Arizona information system in line with the criteria developed for the June 1975 Conference: Issues in Uniform Reporting for Hospital Rate Review.⁴

EXHIBIT K: SOME STRENGTHS AND LIMITATIONS OF THE
ARIZONA INFORMATION SYSTEM

The Existing System - DHS 301

Strengths

- The voluntary compliance aspect of Arizona's rate review program removes the risk of financially destroying the hospital by setting an inappropriate rate, since the hospital is free to raise its rates to the level that was denied; as a result, the information system does not need to be as fine-tuned as under other rate setting methods.
- The hospitals are required to provide data to the Department of Health Services under a broad statutory mandate; the mandate allows the Department the flexibility to obtain, by regulation, additional data as needed.
- The review of both rate increase requests and certificate of need applications by the local planning agency allow for cross-referencing of information submitted by the hospital; the bleak picture presented in rate increase requests can be compared to the rosy picture presented in certificate of need requests to provide a more realistic assessment of the hospital's financial condition.
- On the DHS 301 form the hospital is asked to state why it feels the rate increase is necessary and to provide a statement of overall pricing policy.

Limitations

- Voluntary compliance may not provide the hospital with an adequate incentive to provide complete and accurate data to justify its rate increase request.
- A three year capital expense budget is not required, making it difficult to anticipate expansions. However, DHS Form 301 does ask if additional capital expenses are planned.

Strengths

- Since the Division of Planning and Resources of the Department of Health Services is responsible for certificate of need, licensure, certification for Medicare, and rate review, the organizational structure serves to promote sharing of information for accomplishing the various review and regulatory functions.
- The DHS 301 Form has been used since 1973 and has remained basically unchanged, thus permitting trend analysis to be performed.

Limitations

- Duplication of data still exists with separate data collected for Hill-Burton, certificate of need, and licensure; however, when the new reporting system is in place, some of the duplicate data requests may be eliminated, and other users may find the reporting requirements meet their data needs as well.
- The DHS 301 Form was not based on uniform definitions and reporting conventions. Thus the validity of inter-institutional comparisons and trend analysis is impaired.

New Uniform Reporting System

- A rich data base can be developed from the new reports. Besides hospital volumes, expenditures, and revenues, DHS will collect considerable detail on the differences in hospital capability for rendering different types of service, e.g., nature and scope of daily services and ancillaries, number and mix of specialties and board certification status of physicians, etc.
 - The definitions and instructions in the manual are very clear and detailed; this should enhance the accuracy of the reporting.
- There is a lack of current or planned capability to automate the data.
 - The existing rate review system is primarily concerned with changes in price and volume and does not require the detailed data that will be reported under the new system.
 - If the detailed data are submitted but not used, serious problems in the quality of the data are likely to result.
 - The year-end reports mandated by the new manual are not used for reimbursement by any 3rd party payor.
 - There is no attempt to measure the quality of the institution, even by such gross measures as JCAH accreditation status.

Strengths

- Auditing of data must be paid for out of the Bureau of Health Economic's budget.
- The new uniform accounting and reporting system will enable comparisons among hospitals since data will be reported according to functional activity centers.
- The system includes many important types of data to construct equitable hospital groupings such as the specialist mix of physician staff and detailed description of hospital inventory of services.
- Extensive information on compensation of physicians by department and contractual arrangements with hospital based physicians, and a profile of active medical staff and interns and residents according to 28 clinical specialties is requested.

Limitations

- The reporting system has no way to identify inappropriate utilization of hospital services; there are no linkages with PSRO/UR activity.
- Case mix data is not requested.
- Data to relate the differences in cost to patient care inputs and outputs are not requested.
- As in all other existing systems, the statistical bases for allocation of indirect costs are unsatisfactory.
- The limited staff and budget of the Bureau of Health Economics will severely limit the scope of manual analysis and the ability to audit the data.
- Implementation of the new accounting and reporting system without concurrent auditing is likely to result in poor quality data, thwarting its validity for inter-institutional comparisons.
- For the Bureau's Comparative Study of Rates and Changes, hospitals are currently grouped solely on the basis of bed size. However, for purposes of rate review, groupings are made on the basis of size, services offered, population served and other variables. For purposes of annual reporting, a sophisticated grouping procedure is now being developed.
- There is no indication that the detailed information on physicians will be used.

Strengths

- Training/orientation sessions to acquaint the hospitals with the new manual are being conducted.
- The new uniform accounting and reporting system was designed with significant participation by provider groups and other users and drew on the experience of systems designed for other states.

Limitations

VII. FUTURE PLANS

The new uniform accounting and reporting system is scheduled for implementation for fiscal years beginning on or after July 1, 1976. Arizona officials estimate it will be at least one year before the kinks in the system have been worked out and changes can be undertaken. There are no plans to change the rate review process from voluntary compliance to a mandatory compliance or rate setting program. Changes are being planned in both hospital grouping techniques and in the processing of data for analysis.

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1. A Report on the Rate Review Program as Applied to Health Care Institutions, State of Arizona, Arizona Department of Health Services, May 25, 1976.
2. Chapter 4 of Title 36 of the Arizona Revised Statutes.
3. Bauer, Katharine G., Information Available for Rate Setting by the Washington State Hospital Commission, Working Paper R-45-7, Harvard Center for Community Health and Medical Care, Boston, April 1976.
4. The criteria for the conference along with its proceedings have been published as: Uniform Reporting for Hospital Rate Reviews: Criteria to Guide Development and Proceedings of a 1975 Conference, by Katharine G. Bauer, under DHEW contract #600-75-0142, and may be obtained from the Office of Research and Statistics, Social Security Administration.

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